



ASTRA 300RS

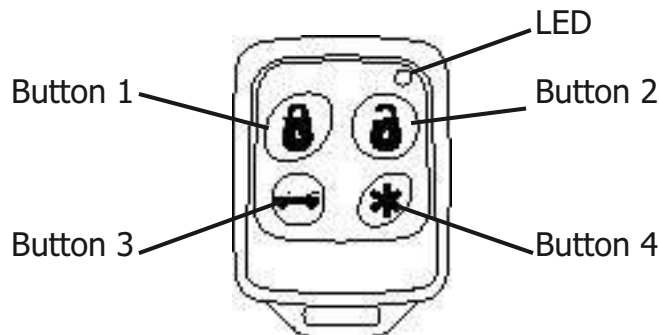
REMOTE START WITH KEYLESS ENTRY

AUTOMATIC TRANSMISSION ONLY

PRODUCT MANUAL

Remote Transmitters

Remote Transmitter Description



The Astra 300 is supplied with two 4-button Remote Transmitters used to control system operations.

Button 1 Locks the doors and when held for 2 seconds, activates the system's Panic feature. Button 1 also locks the doors when the system is in Valet Mode.

Button 2 Unlocks the doors.

. Button 2 also unlocks the doors when the system is in Valet Mode.

Button 3 Activates the Auxiliary 1 output. This output will remain on for as long as the button is pressed.

Button 4 Activates and deactivates the remote start.

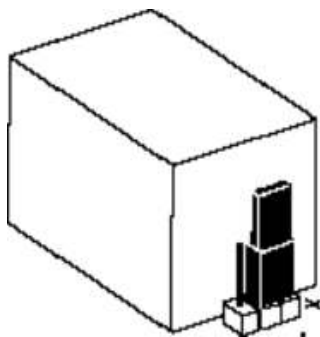
Jumper Selection

Carefully separate the top and bottom halves of the main unit case. Once the cover is removed, the parking light polarity jumper will be visible next to the parking light relay. Set the jumper for the correct polarity output as described below, then reassemble the main unit case.

Parking Light Output. Selects the polarity (+/-) for the output of the on-board Parking Light relay.

Left Pin and Center Pin = negative

Right Pin and Center Pin = positive



System Operation 300RS

Adding/Replacing One-Way Transmitters

To replace lost or stolen transmitters or to add additional transmitters into the system, have all desired transmitters ready and follow the steps below.

Note: Up to 4 transmitters can be programmed to operate the system. To erase any previously stored transmitter codes, be sure to program all 4 transmitter memory locations.

To program the transmitter(s):

1. Turn on the ignition key On, Off, On, Off, and back On.
 - The Horn will flash 3 times.
2. Press and hold the Valet switch for 5 seconds.
 - The Horn will flash 5 times.
- The LED will illuminate.
3. Press Button 1 on the first transmitter.
 - The horn will flash once.
4. Repeat steps 3 for each transmitter (up to 4).
5. Turn off the ignition key.

Battery Replacement

Your Remote Transmitter uses a 12 volt alkaline battery (type 23A), which will require replacement in time. Depending on the amount of use, the battery may last up to six months or more before it needs replacement.

When the battery needs replacing, the system's operating range will decrease or the transmitter LED may not be as bright.

In order to change the battery, first remove 2 screws from the back of the transmitter and separate the top and bottom halves of the case.

While replacing the battery make sure that the positive and negative terminals are positioned correctly, then carefully reassemble the transmitter case.

Panic Mode

In the event of an emergency the transmitter's remote Panic feature can be used to instantly trigger the Horn.

To activate the Panic Mode:

1. Press and hold Button 1 for 3 seconds.
 - The horn will sound.
 - The parking lights will flash.
 - The doors will unlock* allowing access to the vehicle.
2. Press Button 2 to stop Panic Mode.

* If the ignition is on when the Panic feature is activated, the doors will lock for personal safety.

If not deactivated using Button 2, the Panic Mode will automatically exit after 30 seconds and the system will be restored to its previous Lock/Unlock state.

System Operation 300RS

Remote Starting

To Remote Start the System:

1. Be sure the system is not in Valet Mode.
2. Press Button 1 on the remote for two seconds.
 - The parking lights will flash 4 times and turn on.
 - The Horn will chirp 4 times when starter confirmation chirps is enabled.
 - The engine will start and run for the duration of its programmed Run Time.*
 - The heater or air conditioner will turn on (if turned on prior to exiting the vehicle).

*If the engine fails to start on the first attempt, it will repeat the starting procedure 2 more times. If the vehicle fails to start after a total of 3 times the parking lights will flash 4 times and the doors will lock (if installed).

Turn on the ignition and press the brake pedal to disengage the remote start feature and drive the vehicle

Remote Shut Down

When the the Remote Start feature is active, any of the following actions will shutdown the engine:

1. Pressing and releasing Button 1 within 1 second.
 - After the engine shuts down the doors will lock (if installed).
2. Pressing the Brake Pedal.
3. Opening the Hood.
4. Remote Start Time-Out (completion of the timed run cycle).

Remote Unlocking

To unLock the doors:

1. Press and hold button 1 on the remote for 3 seconds. (this feature works only when engine is running).
 - The doors will unlock.
 - The parking lights will flash twice.

Auxiliary Function Outputs

The ASTRA 300RS are equipped with 1 Auxiliary Channel Output allowing the convenience features of the system to be further expanded. This output can be programmed for pulsed, timed, or latched operation, and used to add a number of optional features such as: power trunk release, power window activation, power sunroof control, auxiliary lighting, audio/video system control, and more.

The Pulsed operation setting allows an output to activate as long as the button is held.

The Timed operation setting allows an output to activate when the transmitter button is pressed, and remain activated for 10 seconds or until the transmitter button is pressed again.

The Latched operation setting allows an output to activate when the transmitter button is pressed, and remain activated until the transmitter button is pressed again.

Emergency Valet Switch

If the transmitter becomes lost or inoperable, the Doors can still be unlocked using the following procedure. Before beginning this procedure be sure to have the ignition key ready and know the location of the valet switch.

To Emergency Valet the system:

1. Unlock the door using the key.
2. Enter the vehicle.
3. Turn ignition key on.
4. Press and hold the valet switch until LED turns off.
 - The system will deactivate the starter interrupt output.
5. The vehicle will now be able to start.

Valet Mode

The Valet Mode temporarily disables remote start system so the vehicle may be operated by a mechanic.

To activate or deactivate the Valet Mode:

1. Turn on the ignition.
2. Press and hold the valet switch for 5 seconds.
 - The horn will chirp once and the LED light will stay ON to confirm the Valet Mode is on.
 - The horn will chirp twice and the LED light will turn OFF to confirm the Valet Mode is off.
3. Turn off the ignition.

While in Valet Mode the remote transmitters will continue to lock and unlock the doors, and operate the optional auxiliary functions.

System Installation

1. Thoroughly read and become familiar with the installation instructions before beginning the installation.
2. Review system contents:

Main Unit

Two 4-Button Remote Transmitters

Harnesses

- 6-Wire starter harness
 - 3-Pin Power harness
 - 8-Pin main harness
 - 3-Pin door lock harness
 - LED, Valet Switch and antenna Harness
3. Verify vehicle is equipped with electronic fuel injection, and starts/idles normally before installation.
 4. Determine if vehicle is equipped with a factory theft deterrent system and obtain proper bypass module if required.
 5. Find a location to mount the hood pin switch that will not interfere with the opening of the hood, and is not in a position that can accumulate water. The hood pin is a safety device that must be installed to avoid remote starting during engine servicing.
 6. Verify with the owner, the mounting locations for all visible components, including the LED and Valet switch.
 7. Verify with the owner, the optional features of the ASTRA/300RS and the features that must be programmed during installation.
 8. Inspect and perform a function test of all vehicle systems before and after the installation.
 9. Always use a Volt / Ohm meter for testing vehicle circuits. Never use a test light.
 10. Always look before drilling any holes or mounting self-tapping screws. Be sure fuel lines and exterior wiring looms are clear as they are often close to the chassis and difficult to see.
 11. Protect all wires running from the engine compartment to the interior of the vehicle by covering with electrical tape and split loom tubing. Be sure to use a grommet when routing wires through the firewall.
 12. Properly fuse any additional accessories such as window modules, door lock actuators, etc., making sure to power them separate from the alarm module. This will ensure the functionality of the security system in the event of an accessory failure.

Mounting the Control Unit

The control unit must only be mounted in the interior of the vehicle. Do not mount the main unit in the engine compartment. Choose a mounting location that will not be easily accessible to a thief, and will not interfere with the operation of any vehicle components such as foot pedals, steering column, air vents, seat rails, etc. Do not mount the control unit until after setting the internal jumpers and performing a complete operation check of the system. After installation is complete and performance verified, the control unit can be easily mounted using wire ties through the mounting tabs on the bottom of the unit.

System Wiring

6-Wire Starter Harness

- Pin 1 RED - A: Main Power Input A (+). Connect to the battery or constant power wire at the ignition switch with a minimum 30 Amp supply. Remove the fuse until the installation is complete and all wiring is checked.
- Pin 2 RED - B: Main Power Input B (+). Connect to the battery or constant power wire at the ignition switch with a minimum 30 Amp supply.
- Pin 3 BROWN: Second Ignition Output (+). The Brown wire provides +12V for a second ignition wire. This wire may instead be programmed for use as a second accessory or second starter wire.
- Pin 4 ORANGE: Accessory Output (+). Connect to the accessory wire coming from the ignition switch that supplies power to the heater/air-conditioner. Some cars may have multiple accessory wires.
- Pin 5 YELLOW: Ignition Output (+). Connect to the main ignition wire that provides +12V when the ignition is on and while cranking the starter.
- Pin 6 VIOLET: Starter Output (+). Connect to the the vehicle's starter wire.

Note: if connecting at the ignition switch it is highly recommended to use separate power wires for each Red wire, each with a minimum 30A supply. Remove the fuse until the installation is completed and all wiring is checked.

3-Pin Power Harness

- Pin 1 RED WIRE: Module Power Input (+). Connect to a constant source of +12V.
- Pin 2 WHITE: Parking Light Output (+/-) relay. Connect the White wire to the circuit that shows +12V or ground only when the parking lights are on and set the internal parking light relay jumper to the proper polarity. For parking light circuits exceeding 10 amps, a relay is required. For vehicle's with independent left and right parking light circuits, diodes must be installed to keep the circuits separate.

NOTE: Do not connect the WHITE wire to the vehicle's headlight circuit.

- Pin 3 BLACK: Ground Input (-), The Black wire must connect to a solid chassis ground. Clean away any paint or dirt to insure the best possible ground.

8-Pin Main Harness

- Pin 1 WHITE/VIOLET: Factory Disarm Output (-) 500 mA. The Violet/white wire provides a ground output on disarming and before remote starting to disarm a factory security system. Connect to the wire that requires a ground pulse to disarm the factory security system.
- Pin 2 BLUE/ORANGE: Ground When Running Output (-) 500 mA. Connect to an optional factory security bypass module if required.
- Pin 3 BROWN/WHITE: Horn Output (-) 500 mA. Connect to a relay to activate the vehicle's horn when the alarm is triggered.
- Pin 4 GRAY: Auxiliary 1 Output (-) 500 mA. Connect to a relay for an optional feature such as trunk release, etc. This output may be programmed for momentary, timed, or latched operation.
- Pin 5 WHITE/BLACK: Hood Pin Input (-). Connect the to the hood pin switch. The switch must provide a ground output when switch is opened.
- Pin 6 GREEN/WHITE: Brake Input (+). Connect to the wire that shows +12V when pressing the brake. The Green/white wire is a safety shutdown wire that must be connected.
- Pin 7 BLACK/GRAY: Tach Input. Connect to the vehicle's tach wire or a fuel injector wire if the tachless mode does not provide satisfactory operation.
- Pin 8 ORANGE: Programmable Starter Disable Output (-) 500 mA. The Orange wire provides a ground output while locked to disable the starter on the vehicle/ Factory Rearm Output.

5-Pin White Connector: Two Way Receiver Connector.

3-Pin White Door Lock Connector: Door lock port.

- BLUE WIRE - negative unlock output (-) 500mA.
- GREEN WIRE- negative lock output (-) 500mA.

System Programming

System Programming

The system programming is compatible with both the LCD transmitter or the standard AM transmitter.

Enter System Programming:

1. Turn on ignition.
2. Within 5 seconds, press the valet switch 5 times.
 - The horn will provide three chirps, indicating that you have entered Programming.
3. Press the valet switch the number times equal to the System Parameter you want to change.
 - The horn will chirp each time the valet switch is pressed.
4. Within 5 seconds, press the transmitter button corresponding to the desired operating mode for that System Parameter.
 - The horn will chirp to indicate the setting.
 - 1 chirp = Button 1
 - 2 chirps = Button 2
 - 3 chirps = Button 3
5. When you are finished, turn off the ignition to save the changes.

Default Reset

Following this procedure will set all System Programming Parameters to factory default settings.

1. Enter System Programming.
2. Press Transmitter Button 3.
 - The horn will chirp 6 times indicating that the reset signal was received.
 - All System Programming parameters are now set to factory default settings.
 - The Valet Mode is off.
3. Turn off ignition.

Programmable System Options

The following is a description of the programming options of the system. Some of the program branches control more than one option, and may require accessing a particular branch number twice in order to program all desired features.

3. Lock/Unlock Chirps. Selects between normal and silent operation.
5. Extended Parking Lights. When Enabled, upon Disarming Parking lights will turn On for 30 seconds or until the Dome light turns Off
- Reset Mobilink (Galaxy Mobile) module.
6. Ignition Door Locking / Valet Code Set. This dual program branch selects Ignition Door Locking, and programs the optional Emergency Valet Code. Ignition Door Locking. Selects whether or not the system will automatically lock the doors 5 seconds after the ignition key is turned on. Valet Code Set. Changes the Emergency Valet Code for a higher level of security.
7. Ignition Door Unlocking. Selects whether or not the system automatically unlocks the doors when the ignition is turned off.
8. Door Unlock Pulse. Selects between one pulse or two pulse operation for the door unlock output. Many new import vehicles' factory door locking systems require two pulses on the proper wire to unlock the doors. These systems can be interfaced directly without the use of relays or any additional circuitry by programming the system for double unlock pulse. also programs to pulse the ignition before unlock
9. Door Lock Pulse Length. Selects between a 1-second, 3-second or 0.1 second output for door locking and unlocking. Program to 3 seconds for vehicles equipped with vacuum door locking systems. 0.1 seconds for vehicles that roll windows up or down when lock/unlock output is at 1 second.

System Programming

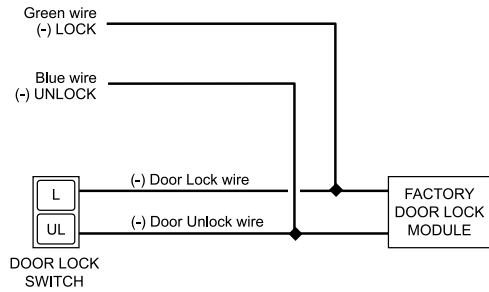
12. Auxiliary 1 Mode. Selects from momentary, 10 second timed, or latched operation for Auxiliary 1. Momentary operation provides an output for as long as the transmitter button is pressed. Timed operation provides an output that turns on for 10 seconds each time the transmitter button is pressed. If the button is pressed again during the 30 seconds, the output will turn off. Latched operation provides an output that turns on when the transmitter button is pressed and remains on until the transmitter button is pressed again.
13. Unlock with Auxiliary 1. When selected, activating the Auxiliary 1 output (usually used to open the trunk) will disarm the alarm.
14. Starter Confirmation Chirps. When Enabled, horn will chirp to confirm Starter Active state. Enable Auxiliary Start Activation. Enable to use the auxiliary start feature if used in keyless entry mode.
15. Start in Valet Mode. Selects whether or not the vehicle can remote start while in the valet mode.
16. Lock After Start. When selected, the doors will automatically lock after remote starting.
17. Lock After Shutdown. When selected, the doors will automatically lock after remote shutdown.
18. Engine Run Time. Selects between 15 or 25 minutes for the remote start run cycle.
19. Automatic Start Mode. Selects between every two hours or every hours for the automatic engine starting feature.
20. Tachless Sense Crank Time. Selecting engine crank time automatically selects the tachless mode and one of three crank times. If the normal engine crank time is too short increase the time by selecting one of the two additional extended crank time options.
Normal - 0.8Sec.
Extended - 1.0Sec.
Super Extended - 1.4Sec.
Tachless Mode. Determines the engine status using an advanced software routine, without requiring connection to the vehicle's tachometer. Tachless operation may not be compatible with some vehicles or in severe temperatures, in which case the tach wire must be connected.
21. Remote Start Program. This dual program branch sets the engine mode for Gas or Diesel, and learns the vehicle's RPM threshold. Learning the RPM threshold automatically selects the RPM monitor mode. For installation into a diesel equipped vehicle, first set the engine type to diesel before learning RPM. Tach Monitor Mode. Monitors the vehicle's tach wire (or a fuel injection wire) in real-time to determine engine status and adjust starter crank time automatically. If programmed for Tach Monitor, the vehicle's tach signal will have to be learned before initial operation (see below). RPM Learn. Start the engine, enter Branch 21 and press Button 1 to learn the vehicle's tach signal. The horn will chirp and the LED will flash once to confirm learning of the tach signal and entering Tach Monitor Mode. The horn will chirp four times and the LED will flash four times if the tach signal was not learned, engine sense mode will not be changed. Gas Engine. Sets the engine type for Gasoline. Diesel Engine. Sets the engine type for Diesel and monitors the glow plug input to make sure the glow plugs are warm before cranking the starter. If the glow plug wire is not connected, the built-in timer waits 15 seconds before automatically cranking the starter.
22. Ignition 2 Relay Program. Selects one of three operating modes for the Ignition 2 relay output: Ignition 2, Accessory 2, or Starter 2.
26. Data Bus Input Trigger. When enabled, all available trigger from the Data Bus Module will be monitored.
(door,hood,brake and all other triggers will not be necessary to hard wire).
27. Horn Chirp Duration. Selects between Normal,(default) Extended, and super extended horn On time During chirping of the horn.
28. Starter Disable Output Mode. Select between Starter Disable output, Factory Rearm output and Second Auxiliary output, on the orange wire.
29. Selects between Astra 1000RS and Astra 4000RS - doesn't apply to Astra 300RS.
30. When enabled doors unlock before start.
31. Data Port Interface Mode: Selects between iDataLink and Fortin module communications.

System Programming

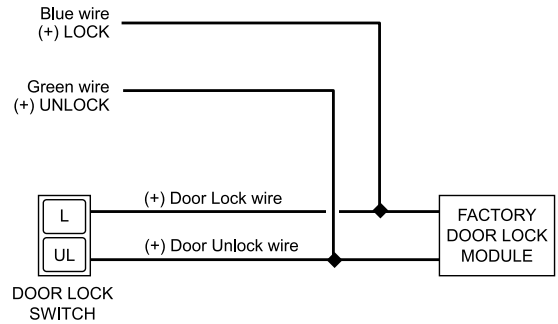
Brunch	Feature	Button 1	Button 2	Button 3
1	NA			
2	NA			
3	Lock/Unlock Chirps		Silent	Horn Chirps ON
4	NA			
5	Extended Parking Lights	On	Off	Reset Mobilink
6	Ignition Door Locking	On	Off	
7	Ignition Door Unlocking	On	Off	
8	Door Unlock Pulse	Single	Double	Pulse Ignition before Unlock
9	Door Lock Pulse Length	1 Sec	3 Sec	0.1 Sec
10	N.A			
11	N.A			
12	Aux 1 Mode	Pulsed	Timed	Latched
13	Unlock with Aux 1	Disabled	Enabled	
14	Starter Confirmation Chirps	Disabled	Enabled	
15	Lock After Start	On	Off	
16	Lock After Shut Down	On	Off	
17	Engine Run Time	15 Min	25 Min	
18	Automatic Start Interval	2 Hour	1 Hour	
19	Tachless Sense Crank Time	Normal	Extended	Super Extended
20	Engine Sense Mode	Smart Start	Smart Start Monitor Disabled	Data Bus RPM
21	Remote Start Program	RPM Mode/RPM Learn	Gas Engine	Diesel Engine
22	Output Ignition 2 Program	Ignition 2 Ouput	Accessory 2 Output	Starter 2 Output
23	N.A			
24	N.A			
25	N.A			
26	Data Bus Input Trigger	Enabled	Disabled	
27	Horn Chirp Duration	Normal	Extended	Super Extended
28	Starter Disable Output Mode	Starter Disable Output	Factory Rearm Output	Aux 2
29	System Mode (Astra 1000/4000)	Astra 1000RS	Astra 4000RS	
30	Unlock Before Start	Disabled	Enabled	
31	Data Port Interface Mode	iDataLink	Fortin	

Door Lock Diagrams

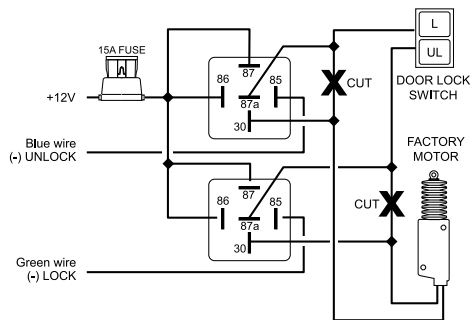
Negative Trigger



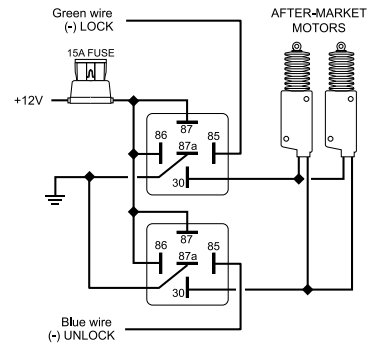
Positive Trigger/ additional 2 relays required



Reverse Polarity



Adding Actuators



Wiring Diagram

